Warrior Drugs

With the right combination of drugs, Patricia Beyea expects to see her ovarian cancer become a managed chronic condition.

Patricia Beyea's mother died at the age of 52 from breast cancer, so when Patricia felt a lump in her own breast at age 34, she knew it was serious. Ignoring the physician who advised her to wait six months after a negative needle biopsy, she sought another opinion. Shortly thereafter, in 1986, she had a modified radical mastectomy and reconstruction for a breast cancer that had spread to a lymph node.

"That was the first time I saved my own life," said Patricia.

Given her family history and later discovery that she had inherited a mutation in the *BRCA1* oncogene, Patricia has been on a vigilant cancer watch with her doctors ever since. Nine years went by before blood tests revealed the first new sign of cancer. This time, it was ovarian cancer.

"Back then, they were doing inhospital chemotherapy following surgery," said Patricia. "A 36-hour treatment with carboplatin and taxol every three weeks—a horrible, tough treatment." But, the cancer went into remission for another decade.

Patricia retired from her job as a physical education teacher in New York and moved to a small town in Florida. Then, in September 2004, Hurricanes Frances and Jeanne came through, forcing her from her home and into a trailer provided by the Federal Emergency Management Agency (FEMA). "Everything on the outside looked fine, but inside my house was a watermark of 24 inches – sewer water, contaminated water. You had to throw everything out."

In the busy time that followed, a few things got neglected, including her normal yearly checkup. "All of a sudden I started having abdominal pains. I went from feeling fine to feeling



Christina Annunziata, M.D., Ph.D., and Patricia Beyea

I couldn't handle the pain unless I was in a hospital on morphine."

This time the chemotherapy that followed her surgery was done on an outpatient basis, but that didn't make it easier to bear. "It's like you're dying but you're still alive," said Patricia.

The cancer returned twice more after much shorter intervals of remission. After a third recurrence in four years, her surgeon was unable to remove any of the tumor because it was completely surrounded by blood vessels. Patricia could not bear the thought of more standard chemotherapy, which seemed increasingly ineffective.

"I told my oncologist I wanted to enroll in a clinical trial," said Patricia. "And he asked me where I wanted to go." Patricia began her quest for an investigational therapy at M.D. Anderson Cancer Center, but was concerned about signing an agreement making her liable for any costs incurred that were not covered by her insurance. "That's when the head of the division told me I should self-refer myself to the NIH."

In September 2008, Patricia enrolled in an NIH protocol for treatment of ovarian cancer with the angiogenesis inhibitors, bevacizumab and sorafenib. She flies from Florida to Washington D.C., every two weeks for the treatments. Her tumors have shrunk in stages and stabilized. "I have finally got to the point of seeing chemotherapy as my ally, not my enemy. Every time I see the drugs going in, I consider them warriors going into battle."